(54) Title: CEREBRAL BIOPOTENTIAL ANALYSIS SYSTEM AND METHOD
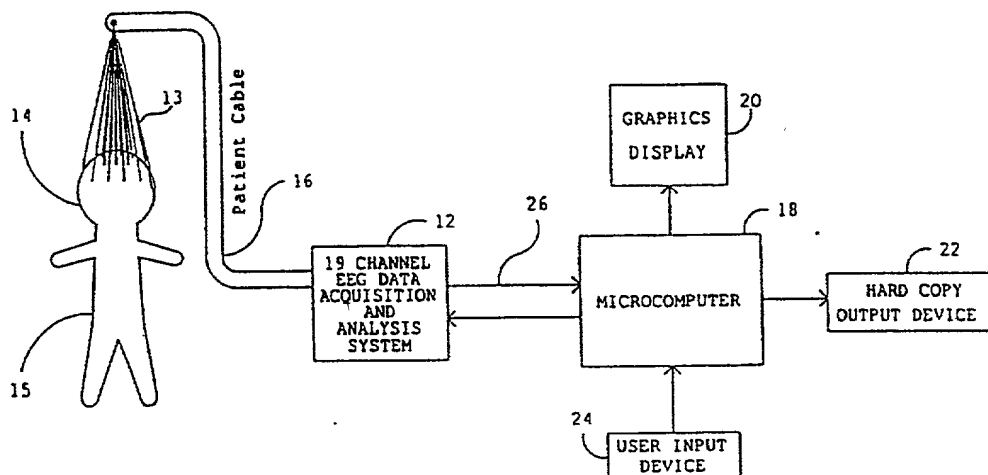
(57) Abstract

A system and method to obtain (19) unipolar EEG signals from electrodes (13) attached to a patient's head (14). The EEG signals are detected by the electrodes and transmitted over a patient cable (16) to the EEG data acquisition and analysis system (12). The system (12) generates all power spectrum, bispectrum, and higher-order spectrum arrays. These arrays are then used in conjunction with clinically predetermined coefficient arrays to produce diagnostic indices. These indices are sent to the host computer (18) and are displayed on the graphics display (2). Printed output of the diagnostic index is also available on the hard copy output device (22) which is connected to the microcomputer (18). The operator interacts with the acquisition and analysis components of the system by means of a user input device (24) with feedback on the graphics display (20).